Severe allergic reaction induced by dexlansoprazole: a case report and literature review

Rault P, Poulin MA, Lacombe Barrios J, Bussières JF

1. Département de pharmacie, CHU Sainte-Justine, Montréal (Qi), Canada, 2. Université Laval, Québec (Qi), Canada, 3. Clinique d’allergie - pédiatrie, CHU Sainte-Justine, Montréal (Qi), Canada, 4. Faculté de pharmacie, Université de Montréal, Montréal (Qi), Canada

We report a case of hypersensitivity (HS) with lansoprazole

Background
• Proton pump inhibitors (PPIs) are one of the most worldwide prescribed drugs. The prevalence of PPIs users was of 21.5% in Quebec in 2010.
• Dexlansoprazole belongs to the new generation of PPIs and was marketed in Canada in 2010.

We report a case of hypersensitivity (HS) with dexlansoprazole

Literature review
1. (ADR) online databases of governments:
   - Health Canada (HC) database, Federal Food and Drug Administration (FDA) adverse events reporting system (FAERS)
   - Public dashboard and Eudravigilance of European Medicine Agency (EMA)

   Dates: data available until Jan 13th, 2019
   • Keywords: “Dexlansoprazole”
   • Results: 0 case in HC and EMA, 6 cases of drug HS included 1 serious case on FAERS

2. Embase, Pubmed, and CINAHL
   • Dates: Jan 17th, 2019
   • Keywords: “Anaphylaxis,” “Hypersensitivity,” “Drug Hypersensitivity Syndrome” and “Dexlansoprazole” and “Proton Pump Inhibitors”
   • Results: 0 case of HS with the dexlansoprazole is found

   Around 90 case reports are found with all PPIs: HS with lansoprazole is one of the most described one
   - Cross reactivities with IPR is frequent and seem to be linked with the pyridine central ring

Selective allergies of dexlansoprazole, lansoprazole and rabeprazole seem to be linked to their side chains

Dexlansoprazole = R-mantaniator of lansoprazole provides 3 to 5 times greater Cmax and has a higher dosage than lansoprazole

Dashes